CLAIMS

1. A method of inhibiting the fusion of a retrovirus with cell membranes, comprising the step of administering a composition comprising at least one monovalent oligosaccharide to a mammal in an amount sufficient to effect said inhibition of fusion.

2. A method of inhibiting retrovirus-mediated syncytia formation, comprising the step of administering a composition comprising at least one monovalent oligosaccharide to a mammal in an amount sufficient to effect said inhibition of retrovirus-mediated syncytia formation.

3. The method of claim 1 or 2, wherein the retrovirus is a Human Immunodeficiency Virus (HIV).

4. The method of claim 3 wherein the HIV is Human Immunodeficiency Virus type 1 (HIV-1).

5. The method of claim 1 or 2, wherein the retrovirus is a syncytia-forming virus.

6. The method of claim 5 wherein the syncytia-forming virus is a HIV-1 variant.

7. The method of claim 1, wherein said composition comprises at least two of said monovalent oligosaccharides in an amount sufficient to synergistically augment said inhibition of fusion.

8. The method of claim 2, wherein said composition comprises at least two of said monovalent oligosaccharides in an amount sufficient to synergistically augment said inhibition of syncytia formation.

9. A method of preventing an infection in a mammal caused by a retrovirus, comprising the step of administering a composition comprising at least one monovalent oligosaccharide to a mammal, wherein said

composition is administered in an amount sufficient to effect said prevention.

10. The method of claim 9 wherein said composition comprises at least two of said monovalent oligosaccharides in an amount sufficient to effect said prevention.

11. A method of treating an infection in a mammal caused by a retrovirus, comprising the step of administering a composition comprising at least one monovalent oligosaccharide to a mammal, where in said composition is administered in an amount sufficient to effect said treatment.

12. The method of claim 11 wherein said composition comprises at least two of said monovalent oligosaccharides in an amount sufficient to effect said treatment.

13. The method of claim 9 or 11 wherein said retrovirus is a Human Immunodeficiency Virus (HIV).

14. The method of claim 13 wherein said HIV is the Human Immunodeficiency Virus type 1 (HIV-1).

15. A method for preventing transmission of HIV in a mammal, comprising the step of administering a composition comprising at least one monovalent oligosaccharide to said mammal, wherein said composition is administered in an amount sufficient to prevent said transmission.

16. The method of claim 15 wherein said composition comprises at least two of said monovalent oligosaccharides in an amount sufficient to effect said prevention of said transmission.

17. The method of claim 15, wherein the transmission is perinatal vertical transmission.

18. A composition comprising at least one monovalent oligosaccharide, wherein said at least one

monovalent oligosaccharide inhibits interaction of CD4 receptors, viral gp120 and membrane glycolipids.

19. The composition of claim 18 wherein said at least one monovalent oligosaccharide is selected from the group consisting of globotriose and lactose.

20. The composition of claim 19 wherein said at least one monovalent oligosaccharide is globotriose.

21. The composition of claim 20 wherein said globotriose is present in a concentration between 5 mM and 25 mM.

22. The composition of claim 19 wherein said at least one monovalent oligosaccharide is lactose.

23. The composition of claim 22 wherein said lactose is present in a concentration between 5 mM and 25 mM.

24. The composition of claim 18 wherein said composition is selected from the group consisting of a pharmaceutical composition and a nutritional composition.

25. The composition of claim 24 wherein said composition can be administered by a route selected from the group consisting of parenteral administration, enteral administration, and dermal administration.

26. The composition of claim 25 wherein said parenteral administration is intravenous.

27. The composition of claim 25 wherein said enteral administration is oral.

28. The composition of claim 25 wherein said dermal administration is local.